

Homopterological Gleanings No. 2. The Types of Certain Genera of Membracidae.

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The types of the genera of Homoptera have never been fixed. Sometimes the accepted types do not conform to the rules of nomenclature and need to be changed. There is apparently in the minds of many entomologists who are not systematists confusion between the generic concept as applied to the actual insects and the names that are to be applied to these insects. The former are not amenable to rules, and the conception of what constitutes generic limits is constantly shifting as our technique grows better and we give more and more attention to the finer details. Names, however, are not only subject to rules, but they must conform to rules or nomenclatural chaos is the result. For our purpose we may accept the "Entomological Code" of Banks and Caudell, as the rules are especially applicable to entomology and are very clearly stated. If we are to achieve stability in nomenclature, it can be done only by laying a firm foundation on a carefully considered set of rules. With these rules in mind, a survey of Dr. Funkhouser's manuscript of the "Catalog of Membracidae" shows the following changes to be necessary.

1. The Genus *Combophora*.

The genus *Combophora* was established by Germar in 1833, Silbermann's Rev. Ent. I: 177, for two species, *Centrotus horridus* Fabr. and *C. trifidus* Fabr. In the same volume, page 227, Burmeister monographs this genus, describing fourteen species in all including *horrida* and *trifida*, as well as two species, *vulnerans* and *Besckii* (*sic*), described as new by Germar. *Besckii* cannot, therefore, be the type of *Combophora*, as it was not included in the genus at the time of its original description. Of the two species originally included, *horrida* belongs to *Heteronotus* Laporte 1832 and *trifida* Fabr. belongs to *Cyphonia* Laporte 1832. The name *Combophora* is, there-

(1) Published with the approval of the Director of the North Carolina Agricultural Experiment Station as paper number 8 of the Journal Series.

fore, not valid as its only included species belong to previously described genera. The only name available for the genus *Combophora* auctorum seems to be *Anchistrotus* Buckton, 1903, Mon. Memb: 147, haplotype *A. obesus* Buckton.

2. The Genus **Hoplophora**.

The genus *Hoplophora* was first used by Perty for a genus of *Orthoptera*,² Delect. Anim. Brasiliam 1830 (1830-34). The part on *Orthoptera* must have been published prior to 1833, as it is reviewed in Silbermann's Rev. Ent. I: 1833, (vide Metcalf, Ent. News XXXII: 238). Germar, Silbermann's Rev. Ent. I: 177, proposed the same name for a genus of Homoptera *Membracidae*, citing *Membracis sagittata* Germar and *Membracis triangulum* Germar. *Sagittata* was removed to the genus *Platycotis* by Stål in 1869, Hemip. Fabr. II: 37, and is now considered a variety of *P. vittata* Fabr., the type of *Platycotis*. Kirkaldy recognized that *Hoplophora* was preoccupied and proposed *Hoplophorion* as a new name. This name will stand, and *Membracis triangulum* Germar is its type.

3. The Genus **Enchotypa**.

The genus *Enchotypa* Stål 1869 has as its type *Hoplophora granadensis* Guerin, cited by Stål in error for *Hoplophora fairmairci* Guerin. Stål later corrected this, but this correction cannot stand according to the "Entomological Code," 96: "The genotype of a monobasic genus is the only specific name cited irrespective of misidentifications or restrictions." The name *Enchotypa* is a synonym of *Potnia* Stål 1866, type *Umbonia venosa*, Germ. I propose the name *Stalotypa*, type *H. fairmairci* Guerin, for the genus formerly known as *Enchotypa* Stål.

4. The Genus **Hemiptycha**.

The genus *Hemiptycha* was described by Germar in 1833, Silbermann's Rev. Ent. I: 177, for the following species: *Membracis galeata* Fabr., *M. obtecta* Fabr., *M. bimaculata* Fabr. and *Centrotus spinosus* Fabr. In Silberman's Rev.

²According to Scudder's Nomenclator Zoologicus; Neuroptera according to d'Orbigny's Dict. Hist. Nat.

Ent. III: 244-247, Germar described this genus more in detail and added six species. Many species have been added to this genus by the various workers since that time, but most of these have been removed to other genera until at the present time only three species are generally recognized as belonging to this genus, and three others are doubtfully referred here. Of these species *Membracis punctata* Fabr. 1775 (equals *Hemiptycha ceruus* Germar 1835) was named as type by Blanchard (d'Orbigny's Dict. Hist. Nat. VI: 533) and has been generally recognized as the type since that time. This species was not included in the genus until 1835, therefore, this designation cannot stand. The disposition of the four species originally included in the genus by Germar is as follows: *Centrotus spinosus* Fabr. 1803 (*Membracis spinosus* Fabr. 1775) is the haplotype of the genus *Umbonia*, Burmeister 1835, Handb. Ent: 138; *Membracis bimaculata* Fabr. 1794 is the haplotype of the genus *Thelia* Amyot and Serville, Hist. Nat. Ins. Hemip.: 540; *Membracis galeata* Fabr. is one of the two species mentioned by Stål when he established the genus *Archasia* 1867, Bid. Hemip. Syst: 556. It was designated as the logotype for this genus by Van Duzee 1916, Check List Hemip. North Amer. 60. *Membracis obtecta* Fabr. is the haplotype of the genus *Hypsclostropis* Stål. 1869 Hemip. Fabr. II: 26. Since this name had already been used, Kirkaldy proposed the name *Gelastophora* for *Hypsclostropis*, Ent. XXXVII: 279. By elimination *M. obtecta* Fabr. becomes the type of *Hemiptycha* Germar 1833, and *Hypsclostropis* Stål 1869 and *Gelastophora* Kirkaldy 1904 are synonyms. While the only remaining species is not necessarily the type of the genus, it would seem to cause much less confusion in this case to select *M. obtecta* Fabr. as the type of *Hemiptycha*. *Hemiptycha* Auctor. is without a name, and I propose *Hemikyptha*, type *M. punctata* Fabr.

5. The Genus **Membracis**.

The genus *Membracis* was described by Fabricius in 1775, Syst. Ent: 675, including fourteen species. The only one of these species that would be considered as typical of the genus

at the present time is *Cicada foliata* Linneus 1766. So far as I have been able to discover there has been no definite type fixation for this genus. Kirkaldy states, Entomol. XXXIII: 27, that Fabricius gives *atrata* as a pseudotype, 1803 Syst. Rhyn: 6, but this is incorrect, as there is nothing to indicate a type designation, and so far as I can discover generic types were not used at that time. Again Kirkaldy, Ent. XXXIII: 264, states that Latreille, Nouv. Dict. Hist. Nat. XXIV, gives *foliata* as the type of *Membracis*. I do not have a copy of this volume before me at the present time, but I do not remember that generic types were designated in this work. My opinion in this matter has been verified by Mr. W. J. Fox, Assistant Librarian, Academy of Natural Sciences, Philadelphia. Van Duzee, Cat. Hemip: 560, gives *Membracis* Fabr., logotype *atrata* Fabr., but this cannot be correct as *atrata* was not one of the originally included species. Since the type of this genus has apparently never been designated, I would designate *Cicada foliata* Linn. 1766 as the type of *Membracis* Fabr. 1775.

Megachile subexilis Ckll., a Resin-Working Bee (Hymen.: Apoidea).

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The *Megachile* bees are commonly termed the "Leaf-cutters" because of a very general habit they have of cutting pieces out of rose leaves, rose petals, poppy petals, the petals of hollyhocks, aspen leaves, and from the leaves and petals of a host of other plants. The pieces cut are of two general shapes, small round ones and oblong larger ones. The former are used for the ends and the latter for the sides of the thimble or oblong-shaped cells into which the pollen and egg are placed and in which the young bee develops, spins its cocoon, pupates and from which it later emerges mature. The cells may be placed in tunnels in the ground, *c. g.*, *M. perihirta*, or in the old stems of plants, *c. g.*, *M. montivaga*, or in various and unique places,